



Continental Motors

ENGINE FIELD INSPECTION REPORT

ENGINE MODEL	O200A
ENGINE SERIAL NUMBER	213969-71A
AIRCRAFT MAKE & MODEL	Cessna 150M
AIRCRAFT SERIAL NUMBER	15075848
AIRCRAFT REGISTRATION	N66117
FILE NUMBER	16-628

NAME	SIGNATURE	DATE
Mike Council		6-21-2017

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GENERAL INFORMATION

EXAMINATION		ACCIDENT DATA	
DATE	6-13-2017	NTSB ACCIDENT #	WPR17LA118
FACILITY	South West Aircraft	NTSB INVESTIGATOR	Andrew Swick
ADDRESS	[REDACTED]	FAA INVESTIGATOR	Michael Baudoux
		ACCIDENT DATE	6-2-2017
		ACCIDENT LOCATION	Banning, CA

ENGINE INFORMATION

ENGINE POSITION	Single
TOTAL TIME	Due to inconsistent engine maintenance records, an accurate estimation of total engine time could not be calculated.
TIME SOH	1294.3 calculated
TYPE & TIME SLI	28.9 calculated
CMI BUILD DATE	Undetermined- Shipped from CMI 8/20/1971
IN SERVICE DATE	Undetermined

Significant logbook information:

There is no logbook entry in either the airframe or engine logbooks which indicates when engine serial number 213696-71A was first installed in N66117. A new engine logbook (brown cover ASA-SE-2 Standard Engine Log) appears to have been used to begin recording engine maintenance for engine serial number 213696-71A. This new engine logbook begins with information involving an engine overhaul dated 9-4-2007 and includes reinstallation of this engine to N66117 at tach time 6446.1.

Report Summary:

Search Code(s):

Examination of the engine was performed by the CMI Investigator under supervision of the NTSB Investigator in charge and FAA FSDO Inspector. The inspection of this engine did not reveal any pre-impact anomalies which would have prevented its ability to produce rated horsepower.

Disposition of engine following exam: The engine will remain in the care, custody and control of South West Aircraft Transportation and Recovery, Chino, CA until released by the NTSB IIC.

INSPECTION WITNESSES

NAME	Mike Council	NAME	Andrew Swick
ADDRESS	[REDACTED]	ADDRESS	Western Pacific Region
ORGANIZATION	Continental Motors	ORGANIZATION	NTSB
PHONE	[REDACTED]	PHONE	[REDACTED]
NAME	Ricardo Asensio	NAME	Michael Baudoux
ADDRESS	Wichita, KS	ADDRESS	Riverside FSDO Office
ORGANIZATION	Textron Aviation	ORGANIZATION	FAA
PHONE	[REDACTED]	PHONE	[REDACTED]

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EXTERNAL INSPECTION OF ENGINE

The damaged engine cowlings were removed to facilitate an inspection of the engine. The engine mount was broken and only engine control cables and wiring were securing the engine to the airframe. The engine exhibited only minor impact damage and the propeller remained attached to the crankshaft propeller flange.



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ENGINE AND COMPONENT EXAMINATION

EXHAUST SYSTEM

Condition: The right exhaust components were undamaged. The left exhaust muffler received minor impact damage. A lighted borescope inspection of the right and left muffler revealed no internal damage which would cause any exhaust restrictions.



INDUCTION SYSTEM

Condition: The induction system remained intact with no apparent impact damage.

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IGNITION SYSTEM

LEFT MAGNETO

Manufacturer: Slick

M/N: 4301

S/N: 07080150

Condition:

The magneto remained attached and produced spark to ignition leads when the engine was manually rotated



RIGHT MAGNETO

Manufacturer: Slick

M/N: 4301

S/N: 07080149

Condition:

The magneto remained attached and produced spark to ignition leads when the engine was manually rotated



IGNITION HARNESS

Manufacturer: Unison

P/N: M1755

S/N:
Undetermined

Condition:

The ignition harness was undamaged and determined to be functional

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SPARK PLUGS

Manufacturer: Unison

P/N: UREM40E

Condition:

The top sparkplugs were removed and inspected. When compared to a Champion Check-A-Plug chart, the sparkplugs appeared normal in wear and coloration. The bottom sparkplugs were removed and inspected. Sparkplugs from cylinders 2 and 4 were oily in appearance. Bottom sparkplug wear appeared normal.



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FUEL SYSTEM

FUEL PUMP

Manufacturer: NA

P/N: NA

S/N: NA

Condition:

No engine driven fuel pump is utilized on this engine for this installation.

CARBURETOR

Manufacturer: Precision
Airmotive/Marvel Schebler

M/N: MA3SBA
P/N 10-4894-1

S/N: MFV92

Condition:

The carburetor was removed and inspected. The accelerator pump was found to be operational. A small amount of blue aviation fuel was present in the carburetor bowl which tested negative for water contamination using water finding paste. The carburetor floats were intact and moved correctly opening and closing the needle valve.



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CYLINDERS

CYLINDER #1	P/N: AEC653151	S/N: T10081-1	Head Date: Undetermined
Work Orders:	Undetermined		
Condition:	Thumb compression was achieved when the engine was rotated manually. No cooling fin damage was exhibited.		



CYLINDER #3	P/N: AEC653151	S/N: T10062	Head Date: Undetermined
Work Orders:	Undetermined		
Condition:	Thumb compression was achieved when the engine was rotated manually. Thumb compression was achieved when the engine was rotated manually. No cooling fin damage was exhibited.		



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CYLINDER #2

P/N: AEC653151

S/N: Undetermined

Head Date: Undetermined

Work Orders:

Undetermined

Condition:

Thumb compression was achieved when the engine was rotated manually. Thumb compression was achieved when the engine was rotated manually. No cooling fin damage was exhibited.



CYLINDER #4

P/N: AEC653151

S/N: Undetermined

Head Date: Undetermined

Work Orders:

Undetermined

Condition:

Thumb compression was achieved when the engine was rotated manually. Minor impact damage was noted on rocker box cover. Thumb compression was achieved when the engine was rotated manually. No cooling fin damage was exhibited.



VALVES

Condition:

Each cylinder was inspected with a lighted electronic borescope. All valves were intact and exhibited normal combustion deposits.

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ROCKER ARMS AND SHAFTS

Condition:

All rocker arms and shafts were intact and operated normally when the engine was manually rotated.



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ACCESSORIES

STARTER

Manufacturer: Sky Tec

P/N: C12ST2

S/N: 2CC-071501

Condition:

No damage was noted to starter



STARTER ADAPTER

P/N: NA

Condition:

This engine is not equipped with a starter adapter.

ALT #1

Manufacturer: Electrosystems

P/N: DOFF10300F

S/N: 9060795

Condition:

No damage noted.



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VACUUM PUMP

Original Manufacturer:
Airborne
Overhauled by: Rapco

P/N: 211CC

S/N: 116075

Condition:

The pump drive was intact and the pump could be manually rotated even though operation was not smooth. The pump was disassembled and inspected. The carbon rotor and vanes were intact. The pump body chamber exhibited scalloped wear- impressions on the chamber surfaces.



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PROPELLER

PROPELLER	Manufacturer: McCauley	P/N: OCM6948	S/N: C13734
Blade 1 S/N:	NA		
Blade 2 S/N:	NA		
Condition:	The propeller was a metal, fixed-pitch McCauley two-blade model. The blades were marked with an "A" or "B" for photo identification. Blade A was undamaged. Blade B exhibited a rearward bending pattern beginning approximately 8" outboard of the blade root continuing outward toward the blade tip.		

